

**REMARKS/ARGUMENTS:****Summary of Amendments to the Claims**

Applicants have amended claims 52, 66 and 80 to more particularly define the invention and canceled claims 53, 57-61, 67, 71-75, 81 and 85-89. No new matter has been added. Claims 52, 54-56, 62-66, 68-70, 76-80, 82-84 and 90-93 are in the application.

**Claims Rejections – 35 U. S. C. § 102**

The Examiner rejected claims 52-93 under 35 U.S.C. § 102(b) as being anticipated by EP 0 842 605 A1 to Petri ("Petri"). Applicants respectfully traverse the rejections.

As an initial matter, Applicants wish to clarify how to convert percentages by volume to percentages by weight, or vice versa. To convert the percentages by weight disclosed in Petri to percentages by volume, the volume of each ingredient has to be determined first and then the total volume of the composition is determined by adding up the volumes of all the ingredients. Subsequently, the volume of each ingredient is divided by the total volume of the composition to obtain the percentage by volume of each ingredient. The total volume of the Petri composition can not be determined without knowing or assuming the types of all ingredients (for example, the specific types of antimicrobial active of essential oil, shear thinning polymeric thickener and the optional ingredients) included in the composition and the density of each ingredient. Therefore, we will convert the units of the present invention for comparison with the Petri composition.

The present invention is directed to a liquid flash-dry disinfectant composition for disinfecting an inanimate surface, comprising:

- about 3% to about 30% by volume of hydrogen peroxide;
- about 10% to about 85% by volume of a flash vaporization component; and
- about 10% to about 65% by volume of water.

Assuming the flash vaporization component is ethanol and using the density value of 0.79 g/ml for ethanol and 1.45 g/ml for hydrogen peroxide at 20°C, the composition of the present invention in weight percentages comprises:

- about 5% to about 43% by weight of hydrogen peroxide;

about 7% to about 80% by weight of a flash vaporization component; and  
about 10% to about 69% by weight of water.

Petri discloses a sprable disinfecting composition comprising:

at least 0.01% by weight of a peroxygen bleach, preferably from 0.1% to 15%, and more preferably from 0.8% to 10% by weight;

at least 0.001% by weight of an antimicrobial active of essential oil, preferably 0.006% to 10%, more preferably from 0.02% to 4% and most preferably from 0.05% to 2% by weight;

from 0.005% to 10% by weight of a shear thinning polymeric thickener, preferably from 0.01% to 5%, more preferably from 0.02% to 2% and most preferably from 0.02% to 1% by weight, and

optional ingredients such as surfactants, additional antimicrobial ingredients, chelating agents, radical scavengers, and solvents, wherein the solvents may be present at a level up to 10% by weight, preferably from 2% to 7% by weight.

A claim can be rejected under 35 U.S.C. §102 only if each element of the claim is disclosed in a single prior art reference. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicants respectfully submit Petri fails to teach, either expressly or inherently, each and every element as set forth in the claims and therefore, does not anticipate the claimed invention for at least the following reasons:

First, the examples disclosed on pages 11 of Petri all contain over 89% by weight of balance water. Composition VI has the lowest amount of water. It contains 10.65% by weight of all other ingredients in total and about 89.35% by weight of balance water. The other compositions all have over 93% by weight of water. The water content of Petri compositions are way over the 10% to 69% by weight (10-65% by volume) range of water of the claimed invention.

Second, with regard to hydrogen peroxide, Petri teaches that the composition comprises at least 0.01% by weight of a peroxygen bleach, preferably from 0.1% to 15%, and more preferably from 0.8% to 10%, and the most preferred peroxygen bleach is hydrogen peroxide. The examples of Petri contain 1.0% to 3.0% by weight of hydrogen peroxide. In contrast, the claimed composition comprises about 5% to about 43% by weight (about 3% to about 30% by volume) of hydrogen peroxide. The examples of Petri fall outside of the hydrogen peroxide range of the present invention.

"[W]hen, as by a recitation of ranges or otherwise, a claim covers several compositions, the claim is 'anticipated' if *one* of them is in the prior art." *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (citing *In re Petering*, 301 F.2d 676, 682, 133 USPQ 275, 280 (CCPA 1962)) (emphasis in original). When the prior art discloses a range which touches, overlaps or is within the claimed range, but no specific examples falling within the claimed range are disclosed, a case by case determination must be made as to anticipation. In order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." See MPEP 2131.03. Clearly, Petri does not disclose any *one* composition falling within the scope of the present claims. Petri, which merely recites an overlapping range without "sufficient specificity", does not anticipate the claimed invention.

Third, with regard to the flash vaporization component, Petri teaches solvents as optional ingredients, which may be present in the composition at a level up to 10% by weight, preferably from 2% to 7%. Numerous compounds are listed as suitable solvents. Petri teaches that in addition to solvents, other optional ingredients such as surfactants, additional antimicrobial ingredients, chelating agents and radical scavengers may be included in the composition. Again, Petri, which merely recites an overlapping range without "sufficient specificity", does not anticipate the claimed invention. Furthermore, Petri merely lists solvents as one of the many other optional ingredients without teaching any specific examples containing solvents.

Lastly, although it may not be necessary to rinse the surface after the Petri composition has been applied and no visible residues are left onto the surface as alleged in Petri, the Petri composition does not flash-dry as the claimed composition, which once sprayed in aerosol form onto an

inanimate surface to be disinfected, to flash vaporize to leave an essentially dry surface having the anti-microbial agent deposited thereon. Since Petri teaches the use of ingredients such as polymeric thickeners, optional surfactants and a high percentage of water, it teaches away from flash-dry compositions.

In view of the foregoing reasons, Petri fails to teach each and every element of the claimed invention and therefore, does not anticipate the claimed invention. Applicants respectfully submit that the claim rejections under 35 U.S.C. 102(b) based on Petri are overcome and withdrawal thereof is requested.

### Conclusion

Based on the foregoing amendments and remarks, favorable consideration and allowance of all of the claims now present in the application are respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place the case in condition for final allowance, then it is respectfully requested that such amendment or correction be carried out by Examiner's Amendment and the case passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

The Commissioner is authorized to charge any required fees, including any extension and/or excess claim fees, any additional fees, or credit any overpayment to Goodwin Procter LLP Deposit Account No. 06-0923.

Respectfully submitted for Applicant,



---

Eva Tan (Reg. No. 46,406)  
GOODWIN PROCTER LLP  
103 Eisenhower Parkway  
Roseland, NJ 07068  
(973) 422-7904